The two main objectives of this project were: (1) to create a meaningful cooperative effort between the Kent County Vocational Technical School District and the Milford School District for the purpose of expanding vocational education, and (2) to establish a system to serve as a model for future expansion of vocational education in Delaware. Procedures included defining the administrative continuity, formation of an advisory council, selection of the project staff, and organizing the project to coincide with existing administrative structure. After faculty and staff were oriented, programs were developed which included: (1) technology for children in Grades K-12, (2) career development laboratories in Grade 5-6, (3) expanded career development program for Grades 5-8, and (4) diversified occupations program for Grades 9-12. Results of the project include: (1) a more positive attitude by teachers and administrators toward vocational education, (2) recognition of career education as the unifying thread from which education is woven, (3) expanded staff and facilities for K-12 career education programs, (4) realization by administrators, supervisors, counselors, teachers, parents, service organizations, business and industry personnel that career education is everyone's responsibility. (Author/GEB)
Interim QUARTERLY REPORT

Project No. 0-361-0013
Contract No. OEC-0-71-0678(361)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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AN OCCUPATIONAL VOCATIONAL EDUCATION MODEL
FOR THE STATE OF DELAWARE

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Joseph L. English
Delaware State Board for Vocational Education
Project Office
906 Lakeview Avenue
Milford, Delaware 19963

September 30, 1971
INTERIM REPORT

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Contract No. OEC-0-71-0678(361)

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Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a contract with the Bureau of Adult, Vocational, and Technical Education, Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Joseph L. English
Delaware State Board for Vocational Education
Project Office
906 Lakeview Avenue
Milford, Delaware 19963

September 30, 1971
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<td>Table II.</td>
<td>Pupil Distribution By Color</td>
<td>14</td>
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</tbody>
</table>
I. SUMMARY OF REPORT

Period Covered:
Oct 1 1970
July 1, 1971 - September 30, 1971

Goals and Objectives Of The Project

Two specific goals have been set for the project:
1. To create a meaningful, cooperative effort between the Kent County Vocational Technical School District and the Milford School District for the purpose of expanding vocational education to meet the needs of all children.
2. To establish a system to serve as a model for future expansion of vocational education in Delaware.

Additionally, five specific objectives are listed:
1. Provisions for broad occupational orientation at the elementary and secondary school levels to increase student awareness concerning the career options open to them in the world of work.
2. Provisions for work experience, cooperative education and similar programs, making possible a wide variety of offerings in many occupational areas.
3. Provisions for students not previously enrolled in vocational programs to receive specific training in job entry skills just prior to the time they leave school.

-1-
4. Provisions for intensive occupational guidance and counseling during the last years of school and for initial placement of all students at the completion of their schooling.

5. A commitment from the districts to continue the successful elements of the project after the contract is terminated.

Procedures Followed

Administration

a. Operationally defined line of administrative continuity.


c. Selection of project staff.
   1. Project Director
   2. Curriculum Coordinator
   3. Job Placement Coordinator
   4. Secretary
   5. Program aides

d. Organization of project to coincide with existing administrative structure (K-4, 5-8, 9-12).

Operational Design

a. Faculty and staff orientation program.
b. Teacher workshops  
c. Small group planning session  
d. Field trip  
e. Consultations  
f. Dissemination and public relations  
g. Community job survey  
h. Technology For Children (K-4)  
i. Career development laboratories (5-6)  
j. Expanded career development program (5-8)  
k. Diversified Occupations Program (9-12)  
l. A new seven (7) area career development center is under construction. The following occupations will be included for grades 9-12:  
1. Hotel-Motel  
2. Auto Services  
3. Landscape  
4. Food Service  
5. General Contracting  
6. Factory employment  
7. General appliance repair  
m. Introductory approach to career development (K-12).  
n. Planning and development with staff and faculty of
Kent County Vocational-Technical Center.

o. Incorporation of selected segments of the Ohio State Curriculum Project. Job counseling and placement for high school students in the two cooperating school districts.

p. Career counseling, job placement and related activities have incorporated into the existing high school counseling program. Elementary and middle school counselors are placing increased emphasis on career education.

q. After hours program for students who could not participate in regularly scheduled vocational classes.

r. Participation of youth clubs in teacher workshop activities.

s. Work experience and cooperative work experience and cooperative work study programs.

t. Summer career opportunities program.

The above procedural design provides an adequate operational framework to complete sequential planning and program development during the first year of operation.

Results and Accomplishments

Through carefully structured programs, teachers and administrators developed a more positive attitude towards vocational
Career education is beginning to be recognized as the unifying thread from which all education is woven.

As a direct result of job placement and counseling activities, many work stations and job opportunities have been made available to students.

Vocational teachers at the Kent County Vocational-Technical School and teachers in the Milford District have gained an appreciation for each other's educational responsibility as it relates to the career education of all children.

Expanded staff and facilities have been made available for K-12 career education programs.

Administrators, supervisors, counselors, teachers, parents, service organizations, business and industry are beginning to realize the career education is everyone's responsibility.

Job placement and career counseling is becoming an integral part of the counseling program.

As a result of dissemination efforts, local, state and national officials have been advised of the project's progress.

Internal and external evaluation plans have been developed and coordinated.

Evaluation

Results of an evaluation conducted by a private cooperation...
tion covering the first year of project activity indicated that planning procedures designed to implement project goals and objectives functioned satisfactorily. Future longitudinal evaluation efforts are designed to determine the effectiveness of programs generated as a result of operational designs developed during the first year of the project's operation (October 1, 1970 to September 30, 1971).

Conclusions And Recommendations

The project is proceeding in an orderly, sequential manor. Planning has been completed for the operational phase scheduled to begin on September 15, 1971. Procedures and activities have been designed to implement program objectives. These activities will be the forms of intensive observation and evaluation during the second year of the program's operation.

It is now axiomatic to the project staff that a single year of program operation will not adequately test operational designs. Therefore, it is recommended that the project be extended to four (4) years which will provide two years of implementation (2nd and 3rd years) with dissemination scheduled during the fourth (4th) year.
Because of the obligation requiring the two schools to continue the program after termination of federal support funds, it is recommended that joint planning begin immediately to budget approximately $75,000 per year to continue the program at a modest operational level. A minimum of $30,000 per year must be budgeted for materials, supplies, equipment and equipment maintenance in order to effectively operate at a K-12 career education program in Milford. Additionally, existing career education facilities need immediate renovation and expansion.
II. BODY OF REPORT

REVIEW OF LITERATURE

Underlying the activities of DOVM is the basic philosophy that the individual, as he progresses through 12 years of schooling, should be presented with the various breadths and depths of the world of work so that he is exposed to a realistic picture of the world of work. Given knowledge of the world of work, the individual should be aware of the various opportunities and requirements of work so that he can plan and prepare for work entry. Concomitant with this planning is the development of interest and motivation in work, as well as positive attitudes towards work. Thus, the Model's emphasis is not so much on presentation of occupations, rather on the individual's gaining knowledge of the world of work and knowledge of himself (his interests, values, aptitudes, and personality) in order to fit into the world of work.

The philosophy of the DOVM project is based on a theoretical rationale provided by recent research in vocational development theory. Super and others (1963, 1967) have investigated the exploratory and decision-making processes in vocational behavior in relation to trial and tentative choice before final vocational choice is made. Tiedeman and O'Hara (1963) investigated the process of gaining a vocational identity and deter-
mined the correlates of the cognitive mechanisms of differentiation and integration set in motion through recognition of a problem or present unsatisfactory situation. Their study proposed an anticipatory stage of vocational development with substages of exploration, crystallization, choice, and clarification. Based on the theoretical formulations of developmental stages in vocational behavior, the DOVM has sought to provide a multi-level curriculum investigating the world of work. The program is designed to coincide with and provide for the developmental aspects of career development beginning with the lowest levels of vocational maturity.

Particularly important in the activities designed by the DOVM project is the consideration of the development of the individual personality in its trait aspects. Research generated by Holland's (1966) model for vocational choice behavior tends to verify that the six category typology of psychosocial environments comprising personality play an important role in vocational choice behavior. In as much as self-concept and attitudes towards school and achievement play an integral role in personality development and vocational choice, the project has sought to include activities designed to foster personality development and positive attitudes. Holland and Whitney (1968), using Holland's classification procedures, found occupational
preferences conforming to theoretical expectations with a high degree of predictive efficiency. Jones (1965), investigating the occupational preferences of secondary school students, found "inner" and "outer" directed and person factors as components of occupational preference.

A component of the introduction of students to the world of work as the student progresses in school is the meaning of work to the individual in both its sociological and psychological aspects. Lodahl and Kejner (1965) have investigated job involvement as a function of a multidimensional scalable attitude affected by social-organizational conditions and learned value orientations. Various other studies (Friedander, 1963) have identified social and technical environment, intrinsic self-actualizing work aspects and recognition through advancement as essential elements of job satisfaction. Other important aspects found related to satisfaction were freedom and intellectual stimulation (Geist, 1963). Activities prepared by DOVM emphasize those aspects of work and job satisfaction as the child moves through the developmental phases of vocational exploration and choice behavior.

On the basis of research relating personality, attitude, and interest to occupational choice, status, and performance (Super and Crites, 1962), the DOVM project has attempted to
incorporate more vocational guidance and counseling into ongoing guidance programs for the students currently enrolled in the secondary school's programs. A job placement coordinator has been hired to provide more vocational information in present guidance programs and to work with those secondary students planning job-entry at the end of their high school education.

In summary, the basic career development point of view held by the project is one which stresses the importance of the self-concept. Under this emphasis, the project sees career development as a dynamic process in which self-concept integrates personality and need structures in a change and developmental process. Herr (1969) sees this model as emphasizing "the importance of progressive synthesis in role clarification and in choice options." Furthermore, Herr sees that under this model the individual

...learns through experience and by socialization what kind of person he is, that of which he is capable, what he values, his strengths and weaknesses, and the kinds of outlets which will be compatible with the pictures he has of himself. (It)...provides for change in individual behavior, change in environmental expectations, and change in the interaction between the individual and the environment.
Goals and Objectives of the Project

Two specific goals have been set for the project:

1. To create a meaningful, cooperative effort between the Kent County Vocational Technical School District and the Milford School District for the purpose of expanding vocational education to meet the needs of all children.

2. To establish a system to serve as a model for future expansion of vocational education in Delaware.

Additionally, five specific objectives are listed:

1. Provisions for broad occupational orientation at the elementary and secondary school levels to increase student awareness concerning the career options open to them in the world of work.

2. Provisions for work experience, cooperative education and similar programs, making possible a wide variety of offerings in many occupational areas.

3. Provisions for students not previously enrolled in vocational programs to receive specific training in job entry skills just prior to the time they leave school.

4. Provisions for intensive occupational guidance and counseling during the last years of school and for initial placement of all students at the completion of their schooling.
5. A commitment from the districts to continue the successful elements of the project after the contract is terminated.

DESCRIPTION OF POPULATION

In terms of test data available from the 5th and 7th grades, it appears that children in the Milford School District are functioning well within the range of State and National averages as assessed by the Metropolitan Achievement Tests.

Distribution of Students, Teachers, Counselors, Aides and Administrators by Organizational Unit

TABLE I

<table>
<thead>
<tr>
<th>Organizational Unit</th>
<th>Student Pop.</th>
<th>Teacher</th>
<th>Counselor</th>
<th>Aide</th>
<th>Admin.</th>
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</thead>
<tbody>
<tr>
<td>K - 4</td>
<td>1,800</td>
<td>54</td>
<td>3</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>5 - 8</td>
<td>1,300</td>
<td>58</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>9 - 12</td>
<td>1,250</td>
<td>60</td>
<td>4</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,350</td>
<td>172</td>
<td>9</td>
<td>22</td>
<td>9</td>
</tr>
</tbody>
</table>
TABLE II
Pupil Distribution by Color

<table>
<thead>
<tr>
<th>Color</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>70</td>
<td>3,045</td>
</tr>
<tr>
<td>Black</td>
<td>30</td>
<td>1,305</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>4,350</td>
</tr>
</tbody>
</table>

In addition, the Central Office administrators consist of five (5) administrators and five (5) supervisors.

OPERATIONAL DESIGN

The reader is invited to refer to Appendix "A" which contains a graphically illustrated career education model designed to generate operational programs.

Instruction, materials and techniques used during the first year planning phase of the project have been appended to the third quarterly report. However Appendix "B" of this report contains: (1) curriculum materials, (2) a career education workshop agenda and (3) a program package for an interdisciplinary career education activity in the first grade.

Other materials and questionnaires relating to job placement, career counseling and follow-up are contained in Appendix "C".
Item 1 - Job Specification Sheet (one for each available job)
Item 2 - Summary of Counseling Workshop held on June 29, 29 and 30, 1971 at Delaware State College.
Item 3 - Cover Letter for Follow-Up Questionnaire
Item 4 - Follow-Up Questionnaire
Item 5 - Employer's Evaluation Form
Item 6 - Educational and Career Planning Survey
Item 7 - Student Referral Form

RESULTS AND ACCOMPLISHMENTS OF THE PROJECT

Perhaps the most appropriate means of viewing project activities is to focus on the new organizational pattern (4-4-4) which became operational September 1, 1971.

K-4

A Technology for Children" program was developed as a vehicle for career education and is presently operational in 25 K-4 classrooms.

All K-4 teachers, counselors and administrators, participated in a visitation workshop designed to orient them to the philosophical concepts of career education.

A summer workshop was conducted for K-4 teachers who would be using T-4-C in the fall of 1971. The workshop provided an operational base for program development.
All 5-8 teachers, counselors and administrators participated in a workshop designed to orient them to the philosophy concept of career education.

A complete unified arts program was developed in the middle school with all teachers contributing to career development activities. Two (2) additional practical arts positions were created: Industrial Arts and Living Arts. Teaching teams have been developed and every child is exposed to a correlated career education sequence. For grades 5 and 6, in addition to regular scheduled laboratory sequences, a career development laboratory has been established in order to encourage teachers and students to develop innovating career education activities across all discipline areas. Seventh and eighth graders have a daily 90 minute sequence for a period of four weeks. Additionally, electives are provided and staffed by traditional subject matter teachers for the purpose of expanding each student's opportunity to develop individual career awareness.

Facilities have been expanded to afford career exploration in the following areas:

- Marketing
- Management
- Distribution
- Manufacturing
- Distribution
- Services
- Mass Production
- Agriculture
- Construction
- Business
- Professions
Additionally, occupational clusters will be developed as the program continues to become fully operational.

Another outcome has been the involvement and interest of middle school counselors in career development. However, it is clearly evident that an extensive amount of work remains in this area.

9–12

A job placement coordinator has been employed on the project staff and has successfully implemented job placement as an integral part of the counseling program provided by the district. Students from both school districts have used and will continue to use the service. Local business men are now contacting the school to locate students who are interested in working. Other spin-off benefits have been in the area of public relations.

Counselors and teachers have been involved in workshops designed to develop programs and curriculum materials for use in operational career education activities. Teachers from the Kent County Vocational Technical Center have been working with teachers at Milford High School to develop meaningful, realistic programs in a number of academic areas which relate to programs being conducted in the vocational center.
Of special significance has been the development of an occupational mall which is scheduled for completion on April 30, 1972. The "Mall" functions as a career development center in the high school. A complete description of the program is included in Appendix "D".

EVALUATION

A contract was negotiated with Bivens and Association of Dover, Delaware for the purpose of evaluating the first year of project activities. The reader is invited to refer to Appendix "E" which contains the complete evaluation report.

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Considering operational constraints--(1) complete reorganization of the Milford School District; (2) opening a new high school at mid-year; (3) resignation of middle school personnel in late July; (4) delays in equipment deliveries; and (5) a general apprehension by many teachers--the planning phase has been completed.

Conclusions reached as a result of an independent evaluation indicated that the first year of operation has been very successful in terms of meeting stated goals and objectives for the project.

Findings generated by external and internal evaluation
indicated that the following recommendations should be considered:

1. Increase the amount of project visibility
2. Structure career clusters in all grade levels
3. Increase the number of supervisory visits to classroom teachers
4. The districts should begin planning for an operational budget when federal support funds are terminated.
5. Establish immediate dialogue with federal officials to ascertain if the project timetable could be increased an additional year to provide two (2) years of operation with the fourth (4) year being used for dissemination.
APPENDIX

DilWARE'S OCCUPATIONAL-VOCATIONAL MODEL

PROJECT GOALS

I. To create a meaningful, cooperative effort between the Kent County Vocational-Technical School District and the Midford School District for the purpose of expanding vocational education to meet the needs of all children served by the Districts.

2. To establish a system to serve as a model for the future development of vocational education programs.

3. Specific training in job-entry skills for students not previously enrolled in vocational education programs.

4. Development of work experience and cooperative education programs.

5. Occupational orientation at elementary and secondary levels.

PROJECT OBJECTIVES

I. Expansion of vocational education in Delaware.

2. To establish a system to serve as a model for the future served by the Districts.

3. Vocational education to meet the need of all children in the Kent County Vocational-Technical School District and the Milford School District.

4. To create a meaningful, cooperative effort between the Districts.

APPENDIX A.
A THEORETICAL FRAMEWORK FOR COMPREHENSIVE OCCUPATIONAL-VOCATIONAL EDUCATION

THE CYCLIC NATURE OF THE EDUCATIVE PROCESS

Milford School District

The Child

Kent Vocational District

Mars' Natural Environment

The World of Work

Changing Technological Forces

Post Secondary Education
A CYCLIC TRAJECTORY CONCEPT FOR EDUCATIONAL SYSTEM DEVELOPMENT

ADMINISTRATION

DIRECTOR AND STAFF

DISSEMINATION

OPERATIONS

Kent County Vocational-Techiccal School District

S. Kent County Vocational-Technical School District

Milford School District

Kent County

Evaluation

Planning

Redesign

Feedback

Testing

Development

ERIC

Local districts

State Education Office of U.S.'s

State Agencies

Local Universities
Comprehensive Education Program

Emphasis is placed upon development of attitudes toward a new world of work. Projects to develop in all children a respect for all work and life aspirations. The world of work without changing the existing curriculum. Desirable attitudes for employability are emphasized and goals of cooperation, value, satisfaction, enthusiasm, dependability, work, loyalty, apprentice, cooperation, and value for work. Reading, themes such as "Seventeen Million New Jobs," common nouns, occupational statements, and desirable attitudes for employability to be emphasized are illustrated on the chart.
The attitude program is continued.

Grades 5 and 6. A CAREER ORIENTATION PROGRAM will include all subject areas and will be used in order to implement the middle school concept.

Other subject areas will also be reshaped to reflect career. The practical arts program will emphasize career orientation.

Appreciation for the work of others, work attributes, personal grooming, job interests, attitude, evaluation, community resources and job opportunities, in-state, out-of-state services, and job entry levels, job requirements and interests, type of work performed, conditions of work, resource information on vocation occupations, and promote information in classes by use of field trips and guest speakers.

In-state, out-of-state services and job entry levels, job requirements and interests, type of work performed, conditions of work, resource information on vocation occupations, and promote information in classes by use of field trips and guest speakers.

The practical arts program will emphasize career orientation.

Other subject areas will also be reshaped to reflect career. The practical arts program will emphasize career orientation.
The Attitude Program is continued.

Examples to be expanded and repeated

A GOOD CAREER EXPLORATION PROGRAM LEADING TOWARD

The Attitude Program is continued.

Examples to be expanded and repeated

A GOOD CAREER EXPLORATION PROGRAM LEADING TOWARD

The Attitude Program is continued.

Examples to be expanded and repeated

A GOOD CAREER EXPLORATION PROGRAM LEADING TOWARD
and supported. Existing occupational classes will be expanded.

We must draw upon basic skill subjects such as

Occupational programs are found in clusters or "job families." We must draw upon basic skill subjects such as

Occupational programs are found in clusters or "job families."
This is the Community Classroom Concept. Cooperative programs are part of the public school or community college system. They provide practical on-the-job experience. They involve the community as partners in the educational enterprise. Examples:

- Industrial Cooperative Education (ICE) trades such as auto mechanics, electronics, printing.
- Distributive Education (DE) trades such as data processing, general clerical work or secretarial training.
- Cooperative Office Education (COE) business and secretarial skills such as data processing, general clerical work, and secretarial training.

Cooperative programs may be included in this program. An individual student receives training in only one of the above.

Examples:

- Industry
- Teacher
- School
- Local Committees
- Advisory Committee
- Career Preparation
- Cooperative Education
- Cooperative Agriculture Occupations
- Cooperative Service Occupations
- Diversified Occupations

Cooperative programs are part of the public school system of community college system. They provide practical on-the-job experience. They involve the community as partners in the educational enterprise.
APPENDIX "B"

Some examples of techniques to facilitate student career development

--films
--discussions
--developing bulletin boards
--making student role books
--creating listings of characteristics of self in relation to educational and occupational alternatives
--analyzing student expectations
--collecting newspaper articles or magazine stories
--writing short themes
--make up games about interests
--make self-ratings
--field trips
--resource people
--examine want ads
--use work samples
--work study
--part-time work
--panels
--profile census data
--define terms
--serve on committees
--role play
--do job analyses
--debate
--interview: workers, employers, Employment Service Counselors, college admissions people, post-secondary AVTS personnel
--gaming
--test interpretations
--make a poster
--contrast or compare characteristics
--debate
--library research
--keep personal records for purposes of analysis
--publish newspaper about career development concerns
--do a follow-up study
THEMES FOR CAREER EDUCATION

**Elementary School**

**Prime considerations:** Formation of self-concept, developing a vocabulary of self and environmental alternatives.

**Factors:**
- Formulating interests
- Developing a vocabulary of self
- Developing a vocabulary of work
- Developing rudiments of basic trust in self and others
- Developing rudiments of initiative
- Developing rudiments of industry
- Developing rudimentary knowledge of fundamentals of technology
- Differentiating self from environment
- Identification with a worker
- Formulating sex social role
- Learning rudiments of social rules
- Learning fundamental intellectual, physical, and motor skills

**Junior High School**

**Prime considerations:** Translation of self-concept into vocational terms; dealing with exploratory needs with purpose and with intent.

**Factors:**
- Using exploratory resources
- Relating interests and capacities
- Identifying personal strengths which one wants to exploit in formulating a vocational preference
Understanding the interdependence of the educational and occupational structures

Differentiation of interests and values

Developing implications of present-future relationships

Accepting one's self as in process

Relating changes in the self to changes in the world

Learning to organize one's time and energy to get work done

Learning to defer gratification, to set priorities

Acquiring knowledge of life in organizations

Preparation for role relationships

Preparation for level and kind of consumption

**Senior High School**

**Prime considerations:** Formulating plans to execute implementation of self-concept and generalized preference.

**Factors**
- Refine and particularize as necessary junior high school factors
- Relating interests and capacities to values
- Planning for specific occupation or intermediate educational alternative
- Acquiring information necessary to execute specific plans
- Achieving mature relationship with peers of both sexes
- Achieving emotional independence of parents and other adults
MIDDLE AND HIGH SCHOOL CAREER WORKSHOP FORMAT

Room 214 Milford Senior High School

Monday

9-10 Welcome - Dr. McLaughlin, Superintendent
10-11 Keynote speaker - Dr. Edwin L. Herr, Pennsylvania State University
11-12 Questions and Discussion "Unifying the Educational System Around the Theme of Career Development"
1-2 DOVM - Carl Hoffman Purposes of Workshop
2-3 Participant requests and suggestions for workshop activities.

Tuesday

9-10 Diversified Occupations - Donald Yost
   Behavior objective units
10-11 " " " " "
11-12 Film - "Nongraded H.S." - 13 min.
1-2 Introduce Kent Center Teachers
   Review field trip procedures and possibilities
2-3 Compile list of community resource possibilities

Wednesday

9-10 Film - "Change" 26 min.
   Brainstorming
10-11 Compile list of possible career development activities
11-12 Divide into groups to write activities
   Group leader & recorder selected
1-3 Begin writing career development activity outlines
   Kent Center teacher participation
Thursday

9-10 "Welcome To The World Of Work" - Franklin A. Arbaugh, Supervisor Industrial Arts and Occupational Education

10-11 Continue writing career development activities

11-12 " " " " " "

1-2 Film - "Making The Curriculum Relevant"

2-3 KC teachers participation in developing career development activities

Friday

9-10 Job Placement - Arthur Bright

10-11 Continue writing career development activities

11-12 " " " " " "

1-2 Group presentation of completed activities

2-3 Wrap-up and evaluation
AN INTERDISCIPLINARY APPROACH TO CAREER EDUCATION

An Adaptation of
"Peter and the Wolf"

by Prokofiev

Grade 1
The authors and developers of this project are:

Laura C. White, 1st Grade Teacher
West Elementary School, Houston, Delaware
Milford School District

P. Maurice Siler, School Psychologist
Milford School District

This project was sponsored by

The Milford School District
906 Lakeview Avenue
Milford, Delaware 19963

Dr. Charles A. McCloughlin
Superintendent

and by

Delaware’s Occupational-Vocational Model
an
Exemplary Project in Vocational Education

Joseph L. English, Director
Carl J. Hoffman, Curriculum Coordinator
Why teach this Particular Lesson Unit?

This lesson unit was prepared for 25 first graders ranging from 6 years and 4 months to 8 years of age. This lesson unit is being taught as a means of providing these children with an expanded experience in music appreciation. Individual capacities in music performance and its appreciation differ greatly. Pupils with less native ability and/or exposure to music should be helped to develop what ability they have and to enjoy doing so. In the primary grades the general classroom program should give everyone sufficient opportunity for enjoyment and growth. It was hoped that this particular lesson unit would encourage and expand upon each child's need to listen, need to think, need to talk and need to explore new media through satisfying artistic self-expression. This hope was more than fully realized! Through the medium of an occupational vocational project, the curriculum was coordinated and expanded to include many facets of meaningful learning. The major facets covered were the Language Arts—in toto, Arithmetic, Art, Music, Physical Education and Industrial Arts.

The academic characteristics of these children can be best partially described in terms of their Reading Readiness scores at the beginning of this school year. Their scores on the Metropolitan Readiness test, given in April 1970, range from 61 out of a possible 64 down to 20. Thirteen of the children scored between 20 and 30. Eight of the twelve who scored between 20 and 30 were designated as ESEA Title children. These eight children receive additional help from a teacher's aide. One child did not enter school for the first time until September 30. Three did not attend kindergarten. Two are repeating the first grade. Seven of the children functioned as if mentally retarded but when tested on the Wisc they showed an I.Q. range from 68 to 143. Most of these seven scored well into the normal range. Five months later, a re-test of the children scoring the 68 showed a Wisc Full Scale I.Q. of 90.

The behavioral characteristics are best stated as follows. In September the classroom was like a survival of the fittest. If someone hits you, hit him back! If someone bites you, bite back! The curse words and obscene language flowed like wine. One particular child when happy would roll over and over on the floor. When unhappy, this same child would howl like the wind. One child put his obscene words into action. He had to be sent to a special class. Simple courtesies such as taking turns, getting into line without pushing, eating with utensils, sitting down, or listening to records might come later, but in September there was little indication that they would ever be achieved.

One of the few ways to hold their attention was to read a story to them, then have them dramatize it. Even the children who would not talk to either the teacher or the aide would eagerly shout, "Who's going over my bridge?" when chosen to be the "Old Ugly Troll!" This kind of activity has proven to be successful throughout the school year. We have used the stories of "Little Red Riding Hood," "The Three Bears," "The Nursery Rhymes," and "The Little Red Hen." This is how "Peter and the Wolf" came about!
A recorded narration of "Peter and the Wolf" was first used as a story for storytime. During the second listening the children quietly began to act out their favorite characters. One little girl got out of her seat and slapping her arms like a bird, started to move around the room. "Quack, quack, "bang, bang," then growling, snarling and other accompanying sounds were soon heard from other children. Soon came the request, "May we please play this story?" They had now learned to say Please. Out of this request of the children grew our present unit.

II. Behavioral Objectives:

1. Listening with evidence of genuine mental and emotional participation.
2. Identify each of the characters in the narration of Peter and the Wolf.
3. Describe the characteristics of each character.
4. Identify the music that indicates each character.
5. Dramatize the story with the narration and the music.
6. Draw and color a picture of the character that most impressed the child.
7. Tell the story of the picture drawn.
8. Dictate a language-experience story about Peter and the Wolf (for the slower group).
9. Write creative stories about Peter and the Wolf (for the faster group) demonstrating the following Language and skills:
   a) Use of a capital at the beginning of each sentence.
   b) Use of capitals for the names of the individual characters.
   c) Use of a period at the end of each sentence.
10. Read the Language-Experience story.
11. Underline the new words recognized in the story (for the slower group).
12. Put word-cards of new words in their word-bank (for the slower group).
13. List the sequence of events in the story.
14. Dramatize the story using only the music.
15. Create a dialogue for the characters.
16. Make simple stick puppets.
   a. Trace the puppet on plywood using carbon paper and a pattern.
   b. Cut the puppet from the plywood by means of a small jig saw.
   c. Mount the puppets on sticks.
   d. Sand the puppets and sticks with sandpaper.
   e. Paint the puppets and sticks.
17. Construct a puppet stage.
   a. Make measurements from drawings such as those shown herewith using a carpenter's square, a yardstick, and a metal measuring tape.
   b. Cut the openings as measured.
   c. Place hinges as per measurements using a hand-drill and a screwdriver.
   d. Use the piece cut from the center opening for the stage floor. Attach to the front of the stage with hinges.
   e. Sand all edges and other rough surfaces. File the points of the screws if they are protruding through the wood.
   f. Paint all surfaces (both sides) using a water base paint.

18. Make the curtains for the stage.
   a. Measure the opening of the stage front to get the size of the curtains needed.
   b. Measure the material to be used for the curtains.
   c. Cut the material for the curtains.
   d. Thread a needle. Tie a knot in the thread.
   e. Do a simple basting stitch on a sample of the material.
   f. Use an electric sewing machine for the final stitching.
   g. Iron the curtains.

19. Mount the traverse rod to the back surface of the front part of the stage. Attach the curtain pins to the curtains. Hang the curtains.

20. Decorate the backdrop.
   a. Paint the sky and the wall.
   b. Cut a tree from plywood with a jig saw and/or a sabre saw. Paint the tree. Add artificial flowers and leaves. Attach the tree to the backdrop.

21. Mount a light above the traverse rod on the back-surface of the stage front.

22. Practice dramatizing the story using puppets, stage and recorded music.

23. Make plans to present a puppet show to another class.
   1. Choose committees for related activities such as:
      a. Make posters advertising the time, place, date and price of admission.
      b. Make brochures to be sent to the parents, etc., advertising the show.
      c. Make programs.
      d. Pop and beg popcorn to be sold at the show.
      e. Make tickets and supervise their sale for the show.
24. Present the puppet show.

25. Compute the costs and income.
   a. Prepare a simple balance sheet to show profit or loss.

III. Motivation:
   The children's own interest in the musical narration and their spontaneous dramatization of it.

IV. Materials and Tools:
1. A recording of Peter and the Wolf with narration.
2. A recording of Peter and the Wolf without narration.
3. Record Player.
4. Tape recorder and tape.
5. Filmstrip of Peter and the Wolf.
7. Drawing and writing paper.
8. Pencils, crayons and tempera paints.
9. Chart paper.
10. 1/4 and 1/2 inch plywood — finishes both sides.
11. 3 sets of butt hinges.
12. Paint for the puppets and the stage.
13. Traverse rod for curtain.
15. Light.
16. Square, metal tape, yardstick.
17. Handsaw, electric saw, jig saw, and sabre saw, hammers, screwdrivers, file, drill and twist bits.
18. Sandpaper.
19. Hinges and screws.
20. Needles, thread, sewing machine.
22. Artificial flowers.
23. Popcorn and bags.
24. Tagboard for posters and tickets.

NOTE: All construction materials for the puppet stage and puppets were supplied by Delaware Occupational Vocational Model.

V. Procedures by the Classroom Teacher:
1. Play the recording of Peter and the Wolf for the class.
2. Assist in identifying the characters.
3. Type the dictated stories.
4. Make the chart of sequence of events.
5. Assist in the dramatization of the story.
6. Supervise the construction and decoration of the puppet stage under the direction of the industrial arts teacher.
7. Supervise the making of the traverse curtains for the stage.
8. Assist in making posters, flyers, programs, etc.
9. Assist in popping and bagging of popcorn.
B. **Music Teacher**
   1. Associate the characters with the music.
   2. Identify the musical instrument used to signify each character.
   3. Show the film strip.
   4. Show pictures of the musical instruments that portray the characters.
   5. Have members of the High School Band bring and play the instruments that portray the characters.

C. **Physical Education Teacher**
   1. Teach the children to skip, waddle, to imitate flying and other physical gestures of the respective characters.

D. **Art Teacher**
   1. Supervise the painting of the backdrop.
   2. Supervise the painting of the puppets.

E. **School Nurse**
   1. Teach a simple first-aid lesson such as how to remove a splinter and what to do for a simple cut.

**IV. Evaluations:**
   Achievement by the children of the ability to perform each of the Behavioral objectives.

**VII. Summary:**
The children have listened to the narration of Peter Peter and the Wolf many times, written stories, made pictures and listed the sequence of events. Without the help of the Music teacher, they can identify the music that portrays each character. They have learned to waddle, imitate flying and skip with assistance from the Physical Education teacher. The children have now dramatized the story without the narrations and created their own dialogue. Many happy hours have been spent by the children on this unit. They have now completed the project and given the show in the small auditorium of their school to all the other classes plus parents and school administrators. The children sold the tickets and popcorn at the door. They counted the money and prepared the simple balance sheet. ---32.45 loss! The children were thrilled! They wanted to divide the money they had taken in!

**VIII. Occupational Vocational Education**

A. "Delaware's Occupational Model was developed to bring about the synthesis of academic and vocational education in an operational setting consistent with the philosophy of providing relevant education for all students."

* "The project was designed to develop exemplary educational programs ranging from Kindergarten through senior high school."
The authors of this teaching unit believe it to be a demonstration of the first two objectives of the Delaware's Occupational Vocational Model. These objectives are:

1. Provisions for broad occupational orientation at the elementary and secondary school levels to increase student awareness concerning the career options open to them in the world of work.


2. Provisions for career education and similar programs making possible a wide variety of offerings in many occupational areas.

This teaching-learning unit gave these first grade children exposure to the following trades and crafts:

1. Carpentry via the stage construction.
2. The performing arts
   a. Puppeteers and puppetry
   b. Musicians
   c. Music teaching as teachers and performers.
   d. Band and symphony conductors.
   e. Musicians and composers as story tellers.
3. Pattern making for tracing the puppets, etc.
4. Electricity via stage lighting, record players and tape recorder.
5. Hunting and hunting guides.
6. Handicrafts via the use of small hand tools for cutting out the puppets, etc.
7. Naturalist via the wildlife characterized
8. Ironing as a career in laundries, dry-cleaners, etc. via steam-pressing of the stage curtains.
9. Sewing and seamstress work via preparatory stages leading to the making of the traverse curtains for the stage.
10. Painting:
    a. Fine arts via the backdrop scene.
    b. Interior and exterior decorating.
11. Disk jockey via responsibilities for handling and playing the records and care of the equipment.
12. Radio and TV announcing via the role of announcer.
13. Photography via still and moving pictures made during all stages of construction and production.
14. Physical Education teacher, Education, etc.
15. Sales persons via some children selling the tickets and popcorn and accounting to the class for the income.
IX. A. One of the major psychological objectives of this teaching-learning unit was to explore and extend the developmental level/s of each child's thought processes. This was pursued along two theoretical models, namely, that of J.P. Guilford and Jean Piaget. Consequently, a brief statement about each is in order.

Guilford holds for three major aspects of the thought processes. They are:

1. Operations
   a. Thinking   c. Divergent thinking   e. Evaluation
   b. Memory   d. Convergent thinking

2. Content
   a. Figural   c. Semantic
   b. Symbolic   d. Behavioral

3. Products
   a. Units   c. Relations   e. Transformations
   b. Classes   d. Systems   f. Implications

Thus it is possible to have 120 combinations of learning thought processes. That is to say $4 \times 5 \times 6 = 120$
B. Samples of kinds of thought process experienced by the children according to Guilford's model and his definition of terms are

1. **Operations**: Major kinds of intellectual activities or processes.
   a. **Cognition**: Identification and recognition of each of the characters portrayed by the instruments. Example: the children drew pictures of favorite characters after hearing the narration with music twice. That is why this production shows a black cat, a blue bird and a white duck. One boy drew Peter as the rabbit, "Peter Cottontail."
   b. **Memory**: Example: The children listed the sequence of events and their characters with appropriate timing of their entrance. Final narration of the play was given entirely from memory by both the announcer and the narrators.
   c. **Convergent thinking**: Producing the correct response to each stimulus. Example: correct timing of role-playing by the puppeteers in response to that which preceded it. Also, memorization.
   d. **Divergent thinking**: Seeking alternate solutions to a problem. Example: As individuals within a group, each child chose those activities and character roles which most appealed to him or her. All of the children functioned in multiple capacities.
   e. **Evaluation**: Example: This we best observed in the critiques of each others' product and role playing as done by the children. This both stimulated and revealed their powers of observation and analysis.

2. **Contents**:
   a. **Figural**: Recognition of both physical and musical forms.
      Examples: One boy brought to class paper cut-out figures of all the characters except the bird. Some he had drawn, and some he cut from coloring books. All of the children could identify the character's portrayed by each passage of music without benefit of accompanying narration.
   b. **Behaviorals**: Example: All of the children participated in spontaneous multiple role playing before and during the use of the puppets.
      Three children had their parents buy the recording of Peter and the Wolf.
   c. **Semantic**: Example: Both intensive and extensive group discussion of the music, narration, physical tasks of construction, etc., and all consequent activities.
   d. **Symbolic**: Example: When the musical instruments were physically presented by members of the High School Band, the children quickly identified each by the character it portrayed.

   On a deeper level, one quiet and withdrawn throughout the school year chose to be a hunter. Approximately a month later he was overtly acting out toward other children his previously suppressed hostilities. The teacher is ready to put him back in his shell!!
3. Products: The end results of thinking.
   a. Units: Example: Perceptual recognition of all physical parts of
      the stage, puppets, and production accessories.
   b. Classes: Example: The children's committees, narrators, puppeteers,
      and stage managers.
   c. Relations: Example: The coordinating functions of the various units
      to each other, to the classes, and of the classes to each other.
   d. Systems: Example: The children's ultimate comprehension of all the
      variant relations to an end product—the play in its totality, i.e., a total
      system.
   e. Implications: Example: Requests of the children of other classes for
      the same kind of learning activities in their rooms.
   f. Transformations: Changes of various kinds of existing or known in-
      formation or in use. Examples: We are not certain of any cleanly
      observed examples of this factor. However, it appeared to occur, but
      this was too subjective an observation to assert as fact.

C. According to Piaget's theory:
   Piaget's concepts of intellectual development rest on two basic notions,
   namely, assimilation and accommodation. By accommodation Piaget means
   the modification in sensorimotor organization, or in a conceptual organiz-
   ation resultant to the stimulation of new circumstances where the established
   organization doesn't quite fit. By assimilation he means the internalization
   of any accommodative change. These two factors are kept in stabilization
   by the organism's ability to maintain an equilibrium of these two respective
   functions. This process extends throughout the full range of thought pro-
   cesses from the simplest sensorimotor activities of infancy to the highest
   levels of abstractions necessary to the ultimate levels of conservation.

   Some samples of our children's experiences in these areas are as follows:

   1. Sensorimotor: Motor activities resultant to stimulation of the sense
      modalities, i.e., the baby's exploratory manipulations resultant to external
      or internal stimuli.
      Example: The manner of grasping and maneuvering the sticks upon which
      the puppets were mounted. Spontaneous gross motor activity resultant to
      listening to the records.
   2. Perceptual: That which is perceived as "out there" in relation to one's
      own body in space. Example: Correct placement of parts of the stage to
      each other; correct use of the various hand-tools, etc.
      with other via spontaneous role playing while listening to music both with and
      without narration. Expressing these relationships of the part to the whole in
      creatively new concepts of the dialogue. Some children rewrote their own versions of the dialogue.
   4. Accommodation: Many of this class can properly be termed culturally
      deprived children. They had little or no prior frame of reference from which
      to even listen to this type of music much less to conceptualize its meanings.
Consequently, accommodation of their internal matrices of references had to occur for them to appropriately act out in gross sensorimotor responses their reaction to the music with narration or the second hearing of it. Secondly, even higher levels of accommodation had to occur for them to later express various levels of conceptualization symbolically as they became able to do.

3. Assimilation: This was clearly demonstrated through their conceptualizations, as before stated, and its consequent heightened levels of well coordinated productivity at all levels of thought processes from simple sensorimotor to abstractions. These children had, indeed, internalized their accommodations.

D. In the February 1970 issue of "Focus on Exceptional Children," Volume 1, Number 9, Dr. Eugene Ensinger presents a proposed learning model for handicapped children. The present authors believe its principles to be equally applicable to the non-handicapped learners. Diagrammatically it appears thusly.
This teaching-learning unit was utilized in the first grade of the West Elementary School of the Milford School District, Milford, Delaware, during the latter part of the school year 1970-71. It is the further observation of the authors of this teaching-learning unit that each child effectively utilized many of his and her opportunities to actively participate according to personal interests and developmental levels of both affective and cognitive competencies.

Laura C. White, Teacher
P. Maurice Siler, School Psychologist
Front view of stage with flanking wings

1/2" plywood finished both sides

Drawing details:
- Dimensions indicated
- Butt hinges noted
- Front view specified
APPENDIX "C"

JOB SPECIFICATIONS

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<tr>
<th>Job Classification</th>
<th>No. of Openings</th>
<th>Entry Rate</th>
<th>Part Time</th>
<th>Full Time</th>
<th>Work Study</th>
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Specify requirements, age, physical capabilities, skills, knowledge, attitudes

Characteristics of job opening:

-49-
DELAWARE STATE COLLEGE—COUNSELORS WORKSHOP

The following is a summary of the Counselors Workshop, June 28-30, with the theme of Guidance and Career Development in the seventies, at the Delaware State College.

...Work has meaning to people, gives satisfaction, it is lawful and can be measured.

...Most of the research data collected has been on middle class whites between the age of 15-45, Super's Exploration and Establishment life stage.

...There is a hierarchy of behaviors that occurs in the different life stages of career development. This hierarchy of behaviors is different for different social and cultural groups.

...La Cascio identified three alternative parallel, progression of sequence of events that effects a child's learning.

1. Continuous - average middle class family college oriented, child experiences certain degrees of satisfaction in many areas. Knows name (many can spell it) ABC's, numbers to one hundred, father's name, occupation, meal times, etc. Correlation between schools objectives and students abilities.

2. Delayed - low income family, work oriented, child has experienced some satisfaction, but not the same degree as continuous child. Many times knows name but can't spell it, count partially, part of ABC's, knows father but not occupation, knows regular meal times, etc. Not up to school expectation. With each year falls further behind unless some change occurs and alters environment. Very likely to become a dropout or a poor student.
3. **Impaired** - culturally deprived, has not experienced success in behavior that are required to succeed in school with middle class standards. Usually doesn't know father, many times his own name, let alone spelling it. No regular schedule of events in a time sequence. This student is destined to fail.

...Herzberg in an experiment with causes of satisfaction and dissatisfaction concluded that both are on separate continuums. Phenomenon that doesn't cause satisfaction may not cause dissatisfaction. They are not on opposite ends of the same continuum.

...Thematic Extrapolation - To infer (values of a variable in an unobserved interval) from values within an already observed interval. If the values extrapolated are hindering a child's developing satisfactory values, then through clinical diagnostic evaluation introduction should be implemented so satisfactory development is continued.

...Dr. Bingham outlined a model for different cultural development. When values are the results of behaviors that have occurred early, suddenly unconsciously by awards and punishments in the environment then that person perceives these values as good, true and unquestionably correct.

A consultation is inevitable when the same issue is perceived with different values because of cultural differences. An example of this is time sequence or long range planning.

![Model Diagram]

(To change values effort must be concentrated here)
...When counseling low-income black students you must be aware that they have developed different and complex defensive techniques. Emotional isolation, illusions, precipitual distortion, and lack of hope, are the results of experiences where there has been little success.

...In an article "Counseling Black Students - any place for Whity," by B.L. Bachner in Journal of Higher Education, 41, 630 - February, 1970, the student indicated greater importance for counselors to be close to his age, same sex and a good listener, above race or cultural difference.

...Dr. Bingham stated there are three ways counselors destroy their own creditability with their clientele.

1. **Lie to the students**, without even knowing it. Example: Requirements for college acceptance and the student finds a college that doesn't require the courses you had the student take.

2. **Miss the boat**, by giving them a long range goal when they want immediate gratification. Counselors should establish immediate, intermediate long range goals and they should be spelled out to the client.

3. **Misrepresent our competency**, that counselors should identify their role. They can't be everything to everyone. Make hard nose decisions about what is their function.

Dr. Whitely conducted a survey of the group of counselors to determine the time each spent in personal and developmental counseling. The counselors on an average spent thirty percent of their time counseling, compared with national studies this was extremely high. The studies conducted have revealed that about seven percent of a counselors time is spent in personal and developmental counseling.
Career counseling is one of the best approaches to personal and developmental counseling.

To improve counseling it must be done quantitative by increasing the actual time in personal counseling and qualitative by improving the counseling technique.

Dr. Whitely asked the counselors these five questions:

1. What does your office look like and what implicit impression does your office give?

2. Am I really listening?

3. Do I ask short questions or are they questions that can lead clients to expound about themselves?

4. Do I ask double questions or the same question a different way?

5. Ask yourself how well do I know this client and how well he knows himself?

The following guidelines were given if counselors were asked to develop a career information class.

1. Do not schedule it as a regular class period.

2. Identify goals and procedures for the class but keep it flexible and student oriented.

3. Do not make all students attend class, it should be voluntary.

4. Use career exploration along with career information when possible.

5. Use community resources to the maximum.

6. Use teachers and students as resources for occupations and vocations.

7. Identify those students that could profit greatest from career counseling.

8. Develop an adequate, up-to-date career information center (manned by students).
August 6, 1971

All 1969 Milford High School Graduates
Information Survey

Dear Graduate:

The Milford School District is in the process of redesigning Curricula offerings to more adequately meet the needs of all students.

Your help and cooperation is needed in order to obtain information concerning your feelings toward certain segments of your school experience.

Therefore, please complete and return the enclosed questionnaire as soon as possible. A self-addressed stamped envelope is enclosed for your convenience.

If you have any questions please call the high school 422-9651.

Sincerely,

MILFORD HIGH SCHOOL

Arthur L. Bright
Job Placement Coordinator

ALB;m
Encls.
1969 GRADUATE FOLLOW-UP QUESTIONNAIRE

INSTRUCTIONS: Place a check (✓) in one parenthesis for each question.

Sex: (✓) Male  Marital Status: (✓) Married
( ) Female ( ) Single

1. High School Program (Curriculum):
   ( ) College Preparatory
   ( ) General
   ( ) Vocational (includes Agricultural, Distributive Education, Business
   Education and Vocational-Technical Education in County Centers)

2. Status 6 Months After Completion of High School:
   (✓) Student (4 years baccalaureate program)
   (✓) Student (less than baccalaureate degree program)
   (✓) Employed
   ( ) Military
   ( ) Housewife (not employed outside the home)
   ( ) Unemployed

3. Present Status:
   (✓) Student working toward a Bachelor's degree
   (✓) Graduate of a program of less than Baccalaureate level
   (✓) Graduate of a program of less than Baccalaureate (4 year) level
   (✓) Housewife and graduate of a program of less than Baccalaureate (4 year)
   (✓) Employed
   ( ) Military
   ( ) Unemployed

VOCATIONAL: COMPLETE THIS SECTION ONLY IF YOU HAVE CHECKED "VOCATIONAL" IN
ITEM NO. 1. ALL OTHERS PROCEED TO NEXT SECTION "EMPLOYMENT
INFORMATION."

4. Location of your vocational training program.
   (✓) Milford High School
   (✓) Kent Vocational Technical School
   (✓) Sussex Vocational Technical School
5. In what skill area did you receive vocational training?

| ( ) Agricultural (Milford) | ( ) Drafting & Design |
| ( ) Business (Milford) | ( ) Electrical Construction |
| ( ) Distributive Education (Milford) | ( ) Exploratory Health Occupations |
| ( ) Agricultural Mechanics | ( ) Farm Mechanics |
| ( ) Auto Body & Fender | ( ) Health Assistant |
| ( ) Auto Mechanics | ( ) Horticulture |
| ( ) Barbering | ( ) Industrial Electricity |
| ( ) Basic Electricity/Electronics | ( ) Licensed Practical Nursing |
| ( ) Beauty Culture | ( ) Machine Shop |
| ( ) Building & Grounds | ( ) Masonry |
| ( ) Carpentry | ( ) Medical Services |
| ( ) Child Care | ( ) Mill & Cabinet |
| ( ) Commercial Arts | ( ) Ornamental Horticulture |
| ( ) Commercial Foods | ( ) Printing & Photography |
| ( ) Cosmetology | ( ) Radio & T.V. |
| ( ) Data Processing | ( ) Sheet Metal |
| ( ) Diesel Mechanics | ( ) Welding |
| ( ) Distributive Education | ( ) |

6. Do you consider your high school vocational education experience of value for your present employment?

| ( ) Yes |
| ( ) No |

**EMPLOYMENT INFORMATION:** (COMPLETE ONLY IF YOU ARE EMPLOYED.)

7. Present Job Title __________________________

8. Occupational Category: (If you need help in determining the appropriate category, please call Mrs. McNatt at 422-9651)

| ( ) Agricultural Occupations |
| ( ) Distributive Education |
| ( ) Home Economics |
| ( ) Office Occupations |
| ( ) Technical Educations |
| ( ) Trade and Industrial Occupations |
| ( ) Amusement & Recreation Occupations |
| ( ) Health Occupations |
| ( ) Student |

9. Job Placement: (How did you locate your first job after completing high school?)

| ( ) Newspaper |
| ( ) Employment Agency (public) |
| ( ) Employment Agency (private) |
| ( ) Found it yourself |
| ( ) Through friends or family |
| ( ) Through the school |
EVALUATION: (ALL GRADUATES ANSWER THIS SECTION)

10. How would you classify your high school counseling experience?
   ( ) Excellent
   ( ) Good
   ( ) Satisfactory
   ( ) Poor

11. From your past experience, what type of information would have been most beneficial to you?
   ( ) College Placement
   ( ) Occupation and job placement information
   ( ) Personal counseling

12. Did you find the counseling information you received to be accurate?
   ( ) Yes
   ( ) No

13. What was the frequency of your visits to the counselor while you were in high school?
   ( ) Never
   ( ) 1 - 5 times
   ( ) 6 - 10 times
   ( ) 11 or more

14. Do you consider your school experiences (k-12) relevant for your present job or educational program?
   ( ) Yes
   ( ) No

15. Considering your present occupational role, would a broad vocational education program in high school have been of value to you?
   ( ) Yes
   ( ) No

16. Did your high school experience provide you with an adequate amount of occupational information?
   ( ) Yes
   ( ) No

17. From your experience would you recommend: (check one)
   ( ) More practical programs in high school
   ( ) Fewer practical programs in high school
   ( ) More required practical courses
   ( ) Fewer required practical courses
18. Would you recommend an increased emphasis on programs for students to explore many occupational, technical and professional areas related to the world of work?

( ) Yes
( ) No
EMPLOYEE'S EVALUATION FORM

Please fill out the form below, for that has been employed by you since as an employee.

It is suggested that the person most familiar with the employee's work fill out the form. Please be as frank and impersonal as possible. In the evaluation please compare the employee with the average employee doing like tasks.

ATTITUDE AND INTEREST

- Enthusiastic
- Interested
- Somewhat indifferent
- Not interested

ADAPTABILITY

- Adjust easily
- Good team worker
- Has difficulty working with others
- Antagonizes fellow workers

ABILITY TO LEARN

- Grasps ideas very quickly
- Above average
- Rather slow to learn
- Very slow

QUANTITY OF WORK

- Unusually high output
- More than expected
- Less than expected
- Below minimum requirements

DEPENDABILITY

- Entirely dependable
- Requires little supervision
- Sometimes neglectful
- Unreliable

INITIATIVE

- Takes hold readily
- Goes ahead reasonably well
- Somewhat lacking
- Lazy

COMMENTS:

QUALITY OF WORK

- Excellent
- Above average
- Below average
- Very poor

JUDGEMENT

- Displays excellent common sense
- Usually does the right thing
- Occasionally uses poor judgement
- Very poor-rash

ATTENDANCE

- Always present - never late
- Always present - but late
- Irregular
- Poor

SUMMARY

- Outstanding
- Good
- Poor

STUDENTS TOTAL PERFORMANCE CONSIDERED

- Very good
- Mediocre
- Unsatisfactory

Evaluation made by:
Name __________________________
Title __________________________
Dept. __________________________
Date __________________________
EDUCATIONAL AND CAREER PLANNING SURVEY

NAME____________________________________________________DATE____________________
GRADE______TEACHER____________________AGE__________Yrs. Mos.

SECTION A

I. Most young people daydream about the kind of work or career they will follow when they are adults. What career would you most like to follow if you had the opportunity and ability? Describe in the box below.

II. Of course, they can be a big difference between a person's daydreams and what, seriously, he or she really expects to do. A few students of your age have made their minds up definitely on a choice of career or occupation but not very many. Most students are thinking of possibilities rather than definite choices. What careers have you given serious thought to as your possible life work? (List choices in order of preference.)

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

III. What is your father's occupation? (The word "father" means your natural father or if you were adopted, it means your foster father.) NOTE: If you have a stepfather, answer instead with respect to him, not your father.

________________________
SECTION 8

OCCUPATIONAL PLANS AND INFORMATION

1. Why Would you like to become a (an) _______? (first choice)
   Answer _______

   Why would you like to become a (an) _______? (second choice, if any)
   Answer _______

   Why would you like to become a (an) _______? (third choice, if any)
   Answer _______

2. What facts should you know about yourself before choosing a career?
   Answer _______

3. How much education is required to be a (an) _______? (first choice)
   Number of Years _______
     High School _______
     Apprenticeship _______
     Trade School _______
     Business School _______
     College or Junior College _______
     Special School _______

4. What does a (an) _______ do at work? (First Choice)
   Answer _______
SECTION C
Curricula

5. The following courses of study are offered in the high school of this district. CHECK THE ONE YOU ARE FOLLOWING.

___ College Preparatory
___ Business Education
___ General Education
___ Technical-Vocational

Why did you decide to take '___ course of study?

Answer

6. Where did you get your information on courses of study for making up your mind?

Answer

7. How do your parents feel about your career choice?

Answer

8. Suppose your parents didn't agree with your plans. What would you do? Remember now, because they disagree, they are not willing to help you with your plans.

Answer

9. Who do you feel should be responsible for your career choice?

Answer
SECTION E

INTERESTS

11. List some of your interests, hobbies and school activities both in school and outside of school.

12. Which of the following areas of interest are closest to your own? Put no. "1" by your first choice. If you have other choices you would put no. "2" by your second choice, "3" by third, etc.

- Outdoor type of work
- Mechanical type of work
- Working with numbers (math)
- Scientific type of work
- Sales work, advertising, public relations
- Work that uses many artistic abilities
- Work that involves reading and writing
- Work that uses my musical abilities
- Work in which I am of direct service to other people
- Secretarial or clerical type work

13. Which of your particular interests would your career choice satisfy and why? (First choice)

SECTION F

ABILITIES

14. Discuss your scholastic abilities. What are your strong points and weak points in school? Give evidence for your statement.

Answer

15. Which abilities do you have that will help you in the work you are planning?

Answer

16. Which scholastic ability do you lack that may limit your success in the work you are planning? (First choice) NOTE: If you honestly feel you have no lack of ability, you should indicate this.

Answer

17. List the grades you received at your last grading period.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Grade</th>
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<tbody>
<tr>
<td>English</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>Social Studies</td>
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<tr>
<td>Science</td>
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<tr>
<td>P.E.</td>
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<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Other (write in subject)</td>
<td></td>
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</tbody>
</table>
SECTION G

18. Things that are important to us personally are called our values. List some of your values.

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

19. What values of yours would working as a (an) ___________ satisfy?  
first choice

Answer

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

JOB VAULES AND DESIRES - If you had a choice of one of these kinds of jobs, which would you choose? Put no. "1" by your FIRST choice you would like to indicate, put no. "2" by your second choice, "3" by the third, etc.

1. A job where you could be a leader
2. A very interesting job
3. A job where you would be "looked up to" by your fellow man
4. A job where you could be boss
5. A job which you were absolutely sure of keeping
6. A job where you could express your feelings, ideas, talent, or skill
7. A very highly paid job
8. A job where you could make a name for yourself - or become famous
9. A job where you could help other people
10. A job where you could work more or less on your own

VALUES

21. After considering your interests, abilities and values, is your career choice appropriate? Support your statements and give evidence.

Answer=

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

22. Are the courses that you are planning to take appropriate for your career choice? If they are not, how do you know they are not?

Answer

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

23. Indicate what you plan to do after you graduate from high school by checking the one most appropriate response to this statement: AFTER GRADUATION FROM HIGH SCHOOL, (Check one)

1. I plan to work full time
2. I plan to enlist in one of the military services
3. I am undecided about whether to go to work or continue in school
4. I plan to go to a trade or technical school
5. I plan to go to a four-year college
6. I plan to go to a junior college only
7. I plan to go to a junior college then transfer to a four-year college
8. I have no definite plans right now
24. Please rate your need at this time for help with educational and career planning.

1. **High Rating:** Need considerable help in figuring out what I am going to do.

2. **Average Rating:** Have some things planned but could use additional help.

3. **Low Rating:** Plans are pretty clear and do not need additional help at this time.
EMPLOYMENT REFERRAL FORM

Company Name: ____________________________ Code: __________

Address: __________________________________ Ph #: __________

Contact: ____________________________ Title: __________

Person Calling: ____________________________ Title: __________

Date and Time of Request: ____________________________

Job Title: (Employer's classification) ____________________________

Job Duties: (as complete as possible) (use active verbs)

__________________________

__________________________

__________________________

Special Requirements, i.e., Manual Skills, Physical Requirements

Work Location

Daily Starting and Stopping Time: From: ____________ To: ____________

Work Days: Mon. [ ] Tues. [ ] Wed. [ ] Thurs. [ ] Fri. [ ] Sat. [ ] Sun. [ ]

Full Time: [ ] Part Time: [ ] Summer: [ ] Coop: [ ]

Job Openings: ____________________________

Starting Wage: Hourly ____________ Weekly ____________

Date and Time For Student Interviews: ____________________________

Students Referred:

Name: ____________________________ Date of Referral ____________

Class Age Curriculum ____________________________

Results:

Hired: Yes [ ] No [ ]

Signature: ____________________________
APPENDIX "D"

The Diversified Occupations program is directed toward the more than thirty per cent of the students in the Milford Senior High School who are classified as "general" students. Their program of studies consists of General English, Social Studies, General Mathematics, with electives of General Shop, Industrial Arts, Agriculture, Vocal and Instrumental Music, Art, Home Economics, and Crafts. These students are those that are not enrolled in the Academic, Business, Vocational-Technical, Distributive Education, or Office Education programs. They do not qualify for the technical programs in business education or vocational education and as such will become a part of the great bulk of persons in the semi and non-skilled area.

This program provides these students with an opportunity to develop salable skills, gain occupational information, and participate in a cooperative work program. The student will study their own capabilities and limitations, skills needed for employment in the chosen area of occupation, on the job training, work habits and attitudes, and ways to perform successfully on the job. This is not an end in itself, but a means of providing the students with experiences in occupational areas, helping them to more intelligently choose their place in the occupational society.
DIVERSIFIED OCCUPATIONS OBJECTIVES

General Objectives:

1. To provide sufficient knowledge and skills to develop proper attitudes toward work in certain occupations.
2. To enable students to become trained for entry into employment upon graduation from high school.
3. To enable students to become efficient and productive adult citizens.

Specific Objectives:

1. To assist students to realistically plan for their future.
2. To make students aware of their potential and limitations through counseling, testing, and self-analysis.
3. To give students a first-hand knowledge of working conditions and skills necessary for successful employment in certain occupations.
4. To inform students of the opportunities for employment in the greater Milford area.
5. To develop certain basic occupational skills as service station attendants, nursery and landscaping workers, general contracting workers, hotel and motel workers, general handyman workers, food service workers, and in factory employment through classroom instruction and training on the job.
6. To aid in placement of students in the occupational areas and to continue to follow them in their chosen field.
THE PLANNING OF THE DIVERSIFIED OCCUPATIONS PROGRAM OF MILFORD SENIOR HIGH SCHOOL

The need for additional programs at Milford Senior High School became prevalent during the 1969 school year. A survey of the educational system revealed very adequate programs for college bound students, the business education students, and the students attending the Kent County and Sussex County Vocational-Technical Centers. But this left thirty-five per cent of the school population classified as "General" students with no planned course of study and no preparation for placement after graduation.

Basic thinking and planning to eliminate this void was pursued during the 1969-1970 school year. A need for occupational preparation was seen as a priority and a pilot Diversified Occupations Program was started with much cooperation between the State Department of Public Instruction and the Administrative Staff of the Milford School District.

The Diversified Occupations, "DO" Program began at Milford Senior High School in September of 1970 providing six occupational study areas based on occupational need in the Milford area. These included hospitality, food services, nursery-landscaping, service station, general contracting, and factory employment. The "Mr. Fixit" course was structured and implemented in the fall, 1971.

The "DO" program provides the students of Milford Senior High School with an opportunity to develop salable skills, gain occupational information, and
participate in a cooperative work study program. The student studies his capabilities and limitations, skills needed for employment in the chosen area of occupation, on-the-job training, work habits and attitudes, and ways to perform successfully on the job. This is not an end in itself, but a means of providing the students with experiences in occupational areas, helping them to more intelligently choose their place in the occupational society.

The classroom instruction in the student’s chosen occupational area is carried out in the occupations Mall. The Mall concept is conductive to practical "Hands-On" experiences with its commercial atmosphere and unique occupational preparation approach.

The work study program is accomplished with much cooperation and coordination between local business leaders and Milford Senior High School. This phase is carried out in the student’s senior year after displaying achievement and competence in the classroom.
PROGRAM DESCRIPTION

The Diversified Occupations Program is designed to encompass all four grade levels - 9, 10, 11, and 12 - of Milford Senior High School. It is directed toward the "general" students, but does not exclude any student, whether they be college prep, business education, vocational, etc.

The program is non-technical in nature, based on the premise that programs of a technical nature may be obtained at the County Vocational-Technical Center.

All students are eligible to participate in an in-depth study of one of seven occupational areas which meet daily for the time listed below.

1. Hotel-Motel Occupation 1 - 45 minute period
2. Auto Services Occupations 2 - 45 minute period
3. Landscape Occupations 2 - 45 minute period
4. Food Service Occupation 2 - 45 minute period
5. General Contracting Occupation 2 - 45 minute period
6. Factory Employment Occupations 1 - 45 minute period
7. Mr. Fix-it Occupations 1 - 45 minute period

Instruction in each area will include an intensive study of the occupation, field trips to related industries, speakers from local business and industry, and related information such as interview and employment, economic factors, fringe benefits, etc. A constant evaluation will take place by utilization of the advisory committee and the Department of Public Instruction.
The twelfth grade students have an opportunity to apply the training received in their chosen occupational field through a cooperative work study program. Students will be placed in the program using the following criteria:

1. Emotional and mental maturity
2. Ability to get along with others
3. Desire to graduate
4. Aptitudes for the chosen occupation
5. Willingness to work

The students will work a part of the day and attend classes the rest of the day. A seminar discussing problems encountered on or related to the job will be conducted as the need arises.

FUTURE CONSIDERATIONS

A guidance program introducing the ninth grade students to the "World of Work" is planned. This will be an exploratory orientation program with provisions to investigate a general spectrum of occupations.

A continuation of the guidance program in the tenth grade is planned. The students will be able to pinpoint the occupational area they are best suited to explore. This will be determined in this grade level by:

1. Testing for aptitudes, abilities, and interests
2. A study of occupations including skills and abilities needed
3. Visits to occupations in the area
4. Speakers from various industries
5. A preliminary in-depth study of the chosen occupational area

The ultimate goal of the entire program in addition to the basic and specific objectives, is to eliminate the dropout rate entirely and to have all students graduating from high school with some type of salable skill.
ADVISORY COMMITTEE

The aid of an advisory committee will be invaluable in this program. This group of people will aid in the general development, execution, and evaluation of the program. More specifically, they will help in determining the training needs of the occupational area, to insure a realistic and practical program, to develop community understanding and support for the methods of occupational education, and to build prestige and respect for the school.

The committee will be comprised of administrators, teachers, coordinators, counselors, and local business and industrial leaders. Sub-committees of from 3 to 5 people will be formed for each occupational area. Thus, a constant awareness of each occupational area is accomplished, and a more thorough examination in each area is provided.
APPENDIX "E"

EVALUATION REPORT

THE
DELAWARE
OCCUPATIONAL
VOCATIONAL
EDUCATION
MODEL

bivens &
associates
inc.
PLANNING
CONSULTANTS

231 WEST LOOCKERMAN ST. DOVER, DELAWARE 19901
302/674-4819

81
Evaluation Report

AN OCCUPATIONAL-VOCATIONAL
EDUCATION MODEL

Submitted to

Mr. Joseph English
Project Director
Milford, Delaware

by

Bivens & Associates, Inc.
Planning Consultants

October 4, 1971
October 4, 1971

Mr. Joseph English, Project Director
Occupational-Vocational Education Model
906 Lakeview Avenue
Milford, Delaware 19963

Dear Mr. English:

It is my pleasure to transmit the Evaluation Report for the first year of the Occupational-Vocational Education Model for the State of Delaware in accordance with our subcontract No. DOVM-SUB-2.

The Evaluation Report is based upon our review and analysis of the overall project goals and objectives, the project organization and personnel, the operational plans, the role of the Advisory Council, the evaluation monitoring system, and other first year activities. This first year has been primarily devoted to program planning. However, several accomplishments have been recognized and evaluated. Recommendations have been made for the improvement of the Model and its operation. A summary of the significant activities of this Program may be found in the report.

Thank you for this opportunity to provide professional independent consultant services for this analysis and evaluation of a significant Occupational-Vocational Education Program in Delaware. We hope that our report will be useful in the conduct of this Program during its remaining two years.

Sincerely,

John A. Bivens, Jr., AIP
President

Enclosure
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<td>Recommendations</td>
<td>25</td>
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INTRODUCTION

The Occupational-Vocational Education Model for the State of Delaware was established by joint agreement between the Kent County Vocational Technical School District and the Milford School District. This program was made possible by a three year federal grant from the U.S. Office of Education.

Each year an independent evaluation is required by the Office of Education. This Evaluation Report is in fulfillment of this requirement as well as to assist in the improvement of the program during its planning and implementation. Bivens & Associates, Inc. Planning Consultants, of Dover, Delaware was selected to provide the necessary professional services needed for the evaluation.

This Evaluation Report covers the first year of the project which has been predominantly planning. The Guideline published by the U.S. Office of Education was followed in the preparation of this Evaluation Report. An attempt was made, however, to adjust the outline to reflect the specifications and unique features of the Delaware Model.

Bivens & Associates, Inc. utilized personal interviews and review of pertinent documents, reports and other materials in the conduct of the evaluation. The staff of the Occupational-Vocational Education Model, the teachers, administrators and other individuals were extremely cooperative in this effort.
Special appreciation is expressed to Mr. Joseph English, Project Director, Mr. Arthur Bright, Job Placement Coordinator, Mr. Carl Hoffman, Curriculum, Mr. Jay Price, Evaluation Monitoring, and Mrs. Dale for their cooperation.

Although many individuals provided information and assistance, Bivens & Associates, Inc. accepts the full responsibility for this Evaluation Report and for the information contained herein.
SUMMARY

In 1970 there were 4,168 students attending school in the Milford School District which is predominantly rural in nature. The Milford and Houston Communities contain about half of the population while the remainder is spread throughout the District's 166 square miles.

During the first year of operation, the emphasis of the Occupational-Vocational Education Model has been on planning. A competent staff has been assembled and the project has been well organized with each staff member having a clear understanding of his responsibility. In addition several significant activities have been initiated this year.

A Technology for Children (T4C) program has been instituted in the elementary schools but with uneven results. The voluntary Student Aide Program, directly supportive of the T4C Program, has been started thereby obtaining important student involvement and stimulating personal interests. Workshops for elementary teachers in the T4C program were held this past summer. Workshops to develop plans for the career development program implementation for the Middle School and High School teachers were also successfully held.

A cooperative program has been established with the Kent Vocational-Technical Center for high school students.
An "after hours" program was initiated but due to return transportation problems, the potential impact of this program was diminished. A special vocational education orientation program for teachers was held at the Kent Center through the provision of substitutes. This program was successful and increased the interest and participation by teachers in the Milford School District in other Model activities.

A Career Development Laboratory has been established in the Middle School to introduce the occupational (job) cluster concept. However, all the necessary materials for the Lab have yet to be delivered.

The Job Placement Coordinator has conducted surveys of community businesses and industries to ascertain their needs and to solicit cooperation. Working with counselors in the District and developing plans for the utilization of the Occupational Mall, the Job Placement Coordinator can assist the students in job placement.

Plans have been made to establish an evaluation monitoring system to monitor student and teacher change within the various programs of the Model.

An Advisory Council for the Model has been formed. Thus far, however, the Council has had relatively little impact on the program planning. As Council activity increases, the
program will be strengthened and the community awareness will be increased. A Community Awareness Program has been initiated with professional public relations assistance. This program should be increased in order to obtain community acceptance of the concept and its corresponding funding responsibilities.

In summary, the Occupational-Vocational Education Model for Delaware is well organized and staffed with competent, innovative individuals. In this first year comprehensive program plans have been made, some educational experiments have been conducted with mixed success, and various programs have been established to meet the objectives of the Program. Although improvements can be made in certain elements, the Model is off to a good start during its first year and if plans are implemented, there are reasons to believe that an effective program can be carried out which will meet the objectives.
LOCALE

The Milford School District, located in the extreme southeastern corner of Kent County, Delaware, and extending into Sussex County contains approximately 166 square miles with a large percent of the school district land area being rural. The total population of the District is 18,000 with 4,168 attending school.

The small community of Milford, according to figures published by the Kent County Planning Office, maintains a population of approximately 5,314. Less than half of the population is concentrated in the two communities of Milford and Houston, with the remainder being distributed throughout the rural sections which constitute the bulk of the District's physical area. Therefore, approximately one half of the area population is concentrated in two small communities while the remainder is sparsely distributed over a large rural landscape.

The Kent County Planning Office has also reported that the population of the town of Milford itself decreased by approximately 3.8% between 1960-1967. Projections also indicated school enrollments should decline in the coming decade.

The economic patterns of the Milford School District are predominantly agricultural with a small degree of retail
trade and manufacturing. Milford School District includes some of the most agriculturally productive soils in the County.

THE SCHOOL SYSTEM

The School System in the Milford School District operates eight schools with K4-4-4 grade groupings. The elementary schools, Evelyn L. Morris, Lakeview, Lulu M. Ross, South Milford, and West Milford, serve grade levels K-4 or an approximate total of 1,684 students. B. Banneker Elementary school serves children in grade levels 5 and 6 or a total of 661 students.

The Middle School -- Milford Junior High -- serves grade levels 7 and 8 or a total of approximately 650 students. Milford Senior High School, serving grade levels 9 through 12 handles approximately 1,163 students. The District as a unit has an enrollment of 4,168*.

The graduating class of 1969 reportedly moved from the Milford High School into the following areas of endeavor:

*September 1970 figures
<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Total</th>
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<tbody>
<tr>
<td>11</td>
<td>11</td>
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<td>15</td>
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<td>6</td>
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</tr>
</tbody>
</table>

Total 174

Per-pupil expenditures amounted to $722 per average daily membership (ADM) compared to a statewide average of $824.

The total income for the District has been calculated at $3,061,637 for the 1969-70 period. The State share of this total income amounts to 75.8% while the federal and local shares amount to 6.9% and 17.3% respectively.

SPECIAL FACTORS

Needs Assessment

As a matter of public record, Governor Russell W. Peterson and the State Board of Education have taken strong affirmative positions in favor of career education for Delaware. The Career Education program has been established as the top priority in education in the State.

The Occupational-Vocational Education Model for the State of Delaware is concluding its first year in operation. Prior to this no formalized vocational program had been
implemented in the Milford School District. However various aspects and techniques of this program have been practiced by individual innovative teachers.

In recognition of the fact that the District lacked a well organized vocational education program, a proposal to institute a model program in the Milford School District was submitted to the Department of Health, Education and Welfare. It was also recognized that the Milford School District and the Kent County Vocational-Technical Center together could offer qualified personnel, desirable physical facilities, a genuine local need for occupational education, and a demonstrated positive attitude that would result in the successful development of an occupational-vocational model for the State of Delaware.

The Vocational Model is designed to serve all students in all grade levels -- a total of 4,158 potential participants -- through assisting them in their awareness of and preparedness for the "world of work". However, not all students will elect to participate in the program. Those students usually seeking acceptance into an insitution of higher education appear to be of the opinion that vocational education is not relevant to their particular ambitions. Yet, the Model as established in Milford is not geared only for the non-college students, but for all students through
exposure to a large spectrum of career possibilities ranging from manual labor to the most intricate of sciences. All students will be given the opportunity to become aware of what options are available to them in the world of work.

**SCOPE OF PROGRAM**

This broad program can best be summarized by the goals and objectives of the Model. These are:

**Goal**

To create a meaningful, cooperative effort between the Kent County Vocational-Technical School District and the Milford School District for the purpose of expanding vocational education to meet the needs of all children served by the District.

**Objectives**

1. Occupational orientation at elementary and secondary levels.
2. Development of work experience and cooperative education programs.
3. Specific training in job-entry skills for students not previously enrolled in vocational education programs prior to leaving school.
4. Intensive occupational guidance and counseling for all students during the last years of secondary school for the purpose of insuring initial job placement.
5. A commitment from the District to continue the successful elements of the project after the contract is terminated.

**Personnel**

The staff selected to fulfill these goals and objectives
is comprised of highly qualified, innovative individuals. Mr. Joseph L. English, author of the project, assumed his duties as Project Director on November 1, 1970. His principal task is to direct the development of a system that will serve as a model for future expansion of Vocational Education in the State of Delaware. Secondarily, his every effort must be employed to seek successful implementation of project plans in this second crucial year of the Program.

The second addition to the staff was Mr. Arthur Bright, Job Placement Coordinator, on February 15, 1971. His tasks include the development of jobs, location of training stations, and the development of work experience activities designed to contribute realism to new and existing career education programs in the District. In essence, the Job Placement Coordinator must provide the District's counselors with a continuous stream of job information in order to increase their effectiveness in assisting students with career decisions.

The third addition was Mr. Carl Hoffman as K-12 Curriculum Coordinator, who joined the staff on March 1, 1971. Mr. Hoffman's most critical tasks are the development of the Technology for Children (T4C) curriculum, and the design of curricula for the Middle School and High School programs. He is assigned to work in close cooperation with
the classroom teachers to continually review and revise the curricula to insure the program's usefulness.

Mr. Jay Price has been assigned the task of evaluation monitoring which will include the development and application of certain measuring instruments. Such a monitoring program will allow the Model staff to evaluate their own program effectiveness on a continuum.

Procedures

The period covered by this evaluation report is October 1, 1970 to October 1, 1971, the first of a three-year program.

The first significant activity geared toward the Model's implementation was the teacher visitations to the Kent County Vocation-Technical Center during the 1970-71 academic year. Each teacher was provided the opportunity to spend one entire day observing and familiarizing himself with an organized vocational education operation.

Following this orientation, activities have been concentrated in pilot programs in the Lulu M. Ross Elementary School (T4C) and the Junior and Senior High Schools (career education and development). The teachers involved in these and the other schools in the District participated in Summer Workshops. The elementary school workshop, held the week of August 2 - 6, 1971, was designed to provide
teachers with information, skills, and the confidence necessary to implement Technology for Children during the 1971-1972 academic year. A highlight of the T4C workshop was the instruction in the use of tools, i.e., hammer, saw, etc. Teachers were shown how to safely use these instruments and then given free reign to practice these techniques by constructing cardboard tables, houses, stages, etc. Projects of this type are to be incorporated into their curriculum.

The Junior and Senior High School workshop was also held in August and was geared to introduce teachers to the rationale and philosophy of career development and to assist them in the development of techniques for implementing career education as a cross-discipline activity. Workshops for all teachers will be held each summer for the direction and further implementation of the program.

The plans set up as a result of the Summer Workshops will be periodically analyzed throughout the school year. In-service schedules have been prepared solely for the purpose of discussing and improving plans currently in operation. The results of these in-service sessions will be used as feedback to further evaluate the effectiveness of this year's orientation program.

The planned activities for this academic year were
specifically designed to fulfill the project's four major objectives listed above. This activity/objective correlation is illustrated below:

**Objective I** Occupational Orientation at Elementary and Secondary Levels.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior High</td>
<td>3. Career Exploration and Preparation Program. T4C Aide Program.</td>
</tr>
<tr>
<td>All Levels</td>
<td>5. Milford Teacher Visitation to Kent Center.</td>
</tr>
<tr>
<td>All Levels</td>
<td>6. Field Trips.</td>
</tr>
</tbody>
</table>

The most crucial procedure utilized in this objective area is the Workshop Program where teachers and students alike received occupational orientation in all levels of education.

**Objective II** Development of Work Experience and Cooperative Education Program.

<table>
<thead>
<tr>
<th>Activities</th>
<th>1. Career Development Center (Occupational Mall, High School).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Employment (Part-time, summer work, cooperative work study, fulltime work).</td>
</tr>
<tr>
<td></td>
<td>3. Community survey.</td>
</tr>
<tr>
<td></td>
<td>4. Coordination with employment agencies.</td>
</tr>
</tbody>
</table>
The most critical procedure utilized in this objective area is the survey performed by the Job Placement Coordinator in an attempt to obtain cooperation among the businesses and industries in the area, which will create job opportunities in the community for students on a cooperative work/study basis.

Objective III Specific Training in Job-Entry Skills for Students not previously enrolled in Vocational Education Programs prior to leaving school.

Activities
1. After-hours Program (Kent Center)
2. Student Career Interests Survey
3. Career Development Center (Occupational Mall)
4. Distributive Education Program (work/study for seniors)
5. Career Orientation Program (Kent Center)
6. Career Work Program

Objective IV Intensive Occupational Guidance and Counseling for all Students during the last years of Secondary School for the Purpose of Insuring initial Job Placement.

Activities
1. Job Placement Coordinator Assistance
2. Guidance Program
3. Community Survey

The most critical procedure utilized in this objective area is the special training of guidance counselors to provide them with an introduction to vocational psychology, career development in the counseling field, and the vocational psychology regarding the disadvantaged.

Student grouping patterns for the above mentioned
activities are determined by the number of interested students. Grouping patterns can vary from an individual project to an activity involving the entire class. The only group distinction factor is by virtue of grade levels, namely Elementary, Junior, and Senior High.

The student/teacher ratio also varies according to activity; ranging from one to an entire class of approximately 25 or 30 students. High School students have assisted in creating a better student/teacher ratio by the establishment of the T4C Student Aide Program, where students in the High School voluntarily elect to be trained in various T4C techniques and are then assigned to classrooms throughout the system to increase per-student coverage and assistance.

The Occupational Mall, currently under construction at the Senior High School, is designed to encourage the active participation of all interested students in the various aspects of the world of work. Skills are utilized immediately upon introduction, creating a more relevant educational environment for all students and a more meaningful experience for everyone involved.

The Mall itself is an extremely innovative technique in Vocational/Career Education. This facility has been designed to contain:

1. A restaurant. This facility is manned by students for the purpose of serving the mid-day meal to the
high school staff and visitors.

2. A Motel. A major motel chain has agreed to supply all materials needed to furnish one motel room and lobby for student operation.

3. A flower shop and greenhouse.

4. A "Mr. Fix-it Shop".

5. A full service station.

The Model has facilitated community acceptance and participation in the project by establishing an Advisory Council to assist in planning, operation, and appraisal activities as various programs are implemented. The Council also aids in maintaining community awareness of the Model and its objectives.

Community awareness is also enhanced by an organized Public Relations program. Professional assistance has been obtained to provide guidance and to develop pertinent public relations instruments and techniques. Newsletters and brochures have been published and distributed throughout the community.

Budget

The total budget for the three years of the Occupational-Vocational Education Model project period is $387,485. The U.S. Office of Education has budgeted $304,485 in federal funds for the project while $83,000 is to be provided as the local share. The "start-up" cost for the first year is about $106,000. The second and third years are budgeted for
approximately $120,000 and $160,000 respectively. These latter two years of the program reflect the continuation aspects of the Model and its full implementation in the Milford School District and at the Kent Vocational-Technical School.

It should be noted that the local matching share increases during the second and third years of the Program while the federal share remains constant. The detailed budget information is available in the offices of the Model in Milford, Delaware.

EVALUATION

Objectives

The Model's five major objectives are:

1. Provisions for broad occupational orientation at the elementary and secondary school levels to increase student awareness of the range of options open to them in the world of work.

2. Development of work experience and cooperative education programs.

3. Specific training in job-entry skills for students not previously enrolled in vocational education programs.

4. Intensive occupational guidance and counseling for all students during the last years of secondary school for the purpose of insuring initial job placement.

5. A commitment from the Districts to continue the successful elements of the project after the contract is terminated.

The first year of the program was essentially a planning
Major Accomplishments and Assessment

I. Organization and Personnel

Based on our interviews, the roles of each member of the organization have been clearly defined and appear to be understood. The organization of this Project has been accomplished using accepted management and administrative practices.

II. Program Planning and Design

A comprehensive effort has been expended to plan and develop specific programs across all levels in the School District for total career education.

The T4C program has been instituted in the elementary schools. However, a certain degree of unevenness exists among the individual elementary schools. This resulted from the District’s insistence that all teachers initially be involved in this program. The Model’s staff originally intended the T4C program to be concentrated in the Ross School until fully developed.

The Cooperative Program with the Kent Vocational-Technical Center for High School students has been implemented and can be considered operative. As a result, the excellent facilities at the Kent Center are made available to the vocationally-oriented students in the High School on a part-time basis.
The Job Placement Coordinator Program has been established, community surveys were conducted, and some students have actually been placed in area businesses and industries through the efforts of the Coordinator. More importantly, the Coordinator has been working directly with the High School Guidance Counselors. Continued community awareness of the Model's activities and the direct efforts of the Advisory Council should serve to enhance this program.

The voluntary Student Aide Program is directly supportive to the T4C Program and serves as a highly motivational force within the school system. Senior high school students are challenged by being charged with actual responsibilities while pursuing their personal interests -- vocational or otherwise.

An "after hours" program at the Kent Center for interested high school students was experimented with during the 1970-71 school term. However, return transportation proved to be a problem with a number of participants and the resultant attrition severely restricted the potential impact of this program.

A Career Development Laboratory has been set up in the Middle School in order to introduce the occupational
(job) clusters concept. However, all the necessary materials for the Lab activities have yet to be delivered. The recent addition of a teacher for Living Arts should serve to significantly strengthen the career development efforts in the Middle School.

III. Training

The T4C workshops for the elementary teachers have been conducted and Model funds were used to remunerate the participating teachers. However, the District was conducting a six-week workshop on the new Continuous Progress Program and the overlap caused a number of teachers to miss the T4C program and vice versa. Such was not the case for the Middle School and High School workshops to develop plans for the career development program implementation.

The Job Placement Coordinator received an intensive training program designed to adequately prepare him for the task of providing the District with manpower, training, and job placement information. He was specifically trained in the techniques and procedures for planning, developing, and conducting an occupational survey of business and industry in areas served by the Milford School District and the Kent County Vocational-Technical School.
IV. Visitations
Through the provision of substitutes, the teachers in the Milford School District were able to attend a special orientation program held at the Kent County Vocational-Technical Center. A survey conducted by the Model staff revealed positive attitudinal change regarding vocational education for those teachers not previously possessing a positive feeling. It can be judged that the appropriate timing of these orientation sessions smoothed the way for later teacher participation in the training programs.

V. Evaluation Monitoring
Plans have been established to monitor student and teacher change from the various programs through the use of a variety of test instruments. Specialized staff is available to the Model to develop these evaluation instruments, such as the teacher attitude survey noted above.

The original evaluation plan to randomly select teacher participants (and their students) for the various programs had to be abandoned because of the desire of the School District to achieve broad participation. However, this should not abrogate the ultimate usefulness of the evaluation program.
One particular area of attention in terms of evaluation measurement should be the change in occupational awareness among the T4C students as this program is implemented in the District's elementary schools.

VI. Advisory Council
The Advisory Council for the Model was formed late in this first year and as a result, this body has had relatively little impact on program planning. The delay in establishing the Council came about through a decision problem concerning the correct representation from the Milford School District Board. The Model staff should now attempt to encourage active participation by the Council in the continued program planning and most especially, in the areas of community awareness programs and business-industry cooperative activities.

VII. Community Awareness
The initial efforts of the Model staff to establish community awareness of the Project were limited to presentations to area civic organizations and one-time newspaper coverage. Realizing the difficulties with keeping such a program on a viable and continuing basis, professional assistance was obtained through a local Public Relations firm. A detailed plan has been developed by this organization that addresses the problems
of media utilization and the time duration for which community awareness needs to be maintained.

**Overall Evaluation**

The most appropriate framework against which to evaluate the performance of the Occupational-Vocational Education Model is the set of specific objectives established at the outset of the project. Therefore, our overall evaluation of the Model's first year activities is oriented to this format.

I. **Occupational Orientation at Elementary and Secondary Levels.**

Planning and initial implementation toward this objective appears to be most comprehensive. Teacher preparation for incorporating occupational orientation in the various curricula has been adequate. However, the overlap of the District's Continuous Progress Program has caused an unevenness in teacher training and, unfortunately, some confusion as to how both programs are to be simultaneously implemented (especially the T4C program). Further follow-up by the Model's staff should alleviate the slight confusion over these two programs.

The current order-of-priority for the orientation program is (1) elementary level, (2) Middle School,
and (3) High School. This is understandable since staff coverage is limited and maximum impact can be gained at the elementary and junior high levels. However, renewed efforts in the forthcoming project year should be made at the High School to insure that a comprehensive occupational program is implemented.

II. Development of Work Experience and Cooperative Education Programs

The development of the Job Placement Coordinator Program directly addresses the needs identified by this objective. An excellent job has been done in surveying community business and industry needs and soliciting their cooperation. The successful placement of students in directly-related work situations will reinforce the Model's career education programs.

It is unfortunate that the District's Occupational Mall is not yet operative inasmuch as this impacts the other thrust of this objective; that is, cooperative education.
III. Specific Training in Job-Entry Skills for Students Not Previously Enrolled in Vocational Education Programs Prior to Leaving School.

Because of unforeseen logistics problems, the After-Hours Program at the Kent Center proved to be marginally successful. The delay in opening the Occupational Mall will also affect the progress in meeting this important objective.

The plans for the Distributive Education Program for Seniors and the Career Orientation Program at the Kent Center do correlate with this objective, but more aggressive action will undoubtedly be required. The results from the Student Career Interests Survey should give some important guidance to the Model's staff in terms of requisite program development.

IV. Intensive Occupational Guidance and Counseling for all Students during the Last Years of Secondary School for the Purpose of Insuring Initial Job Placement.

Occupational guidance and counseling is a critical element in the project, and the Job Placement Coordinator has developed excellent communications with the District's counselors. Also, the hiring of additional counselors should serve to strengthen the overall program in the Milford School District.
The plan to provide feedbacks on area employment patterns, industry needs, and occupational trends as a result of the Coordinator's contacts with the community should significantly enhance the overall guidance and counseling efforts in the District.

V. A Commitment from the Districts to Continue the Successful Elements of the Project after the Contract is Terminated.

Our direct interviews conclusively show that enthusiasm for the Model's plans and programs among school personnel in the Districts is indeed quite high. The ultimate commitment to continue successful elements of the project, in large measure, must come from outside the educational community. The inherent value of the Project's activities must be amply demonstrated to local residents, their elected representatives, state government officials, and area businesses and industries.

The Advisory Council activities, coupled with a sound and continuing public relations/community awareness program, can provide a positive impact on this critical objective. Both these areas received attention late in this first year of the project. An overall public relations plan has now been developed,
and professional assistance has been contracted to aid in implementation. However, the Advisory Council still appears to be starting slowly, and this activity should receive renewed attention by the Model's staff in the ensuing period.

The above evaluation of activities against objectives is qualitative and rather subjective. Since the first year of the Occupational-Vocational Education Model was confined to planning along with some initial program's implementation, little quantitative data are available to adequately assess these efforts. We have attempted to address this evaluation to how the organization, planning, and program development correlates with the objectives of the Project. Within that context, it is apparent that save for some small problems in specific areas, the Model's approach has been thorough and comprehensive, and the activities of the staff have been consistent with the major objectives stipulated.

The actual impact of the Project's programs as they are implemented can only be quantified during the remaining two years. However, advance thinking has been given to this aspect and an ongoing Evaluation Monitoring Program has been established within the Project organization. The administration of special measuring instruments relative to student and
teacher awareness levels, attitudinal changes, knowledge improvements, etc., will provide the Model's staff with important feedback on a continuing basis rather than at major terminal points. Therefore, program adjustments and re-planning can be adequately handled in order to maintain performance against objectives.
RECOMMENDATIONS

This first year, the period covered by this Evaluation Report, of the Occupational-Vocational Education Model was essentially a planning and "start up" year. Based upon our interviews with the staff of the Model, administrators, teachers, and others and upon our analysis and evaluation, certain recommendations are made which are intended to assist in the improvement of the Program. It is within these parameters that the following recommendations are made.

Recommendation: THAT THE OCCUPATIONAL-VOCATIONAL EDUCATION MODEL TIME PERIOD BE EXPANDED FOR ONE ADDITIONAL YEAR.

Two years have been allocated for program implementation. At the end of that time, there is an objective to get a commitment from the Districts for the continuation of the successful project elements. Two years do not appear sufficient to permit the observation of a full cycle and therefore, the determination of the full potential of each activity. A full cycle would include the progression of elementary students into Middle School; Middle School students into High School; and High School students into jobs with appropriate follow-up surveys.

Recommendation: THAT THE STAFF OF THE MODEL BE INCREASED TO PROVIDE FOR BETTER COVERAGE OF PROGRAMS AND TO MAINTAIN "VISIBILITY" AT ALL SCHOOLS.

There is an obvious need to maintain close liaison and a "high profile" in each of the schools within the District. Only through a close day-to-day type of contact can the program reach its full potential. The limited staff cannot spend an adequate amount of time in each school. Therefore, additional staff is needed.
Recommendation: THAT THE ADVISORY COUNCIL PARTICIPATION IN THE PROGRAM BE INCREASED.

The Advisory Council has not been as active in the Program as needed. Increased participation would permit the staff to have the benefit of the knowledge and experience of the Council members while enhancing community awareness of the Program.

Recommendation: THAT THE COMMUNITY AWARENESS PROGRAM (PUBLIC RELATIONS) BE ACCELERATED.

Although there has been a good start in this Program, these efforts should be accelerated. The Community Awareness Program should continue its current activities while expending new efforts specifically pointed toward continued acceptance of the Model approach within the Districts. This is particularly important for the shift of funding responsibility to the State and local Districts.

Recommendation: THAT THE SYSTEM FOR PROCURING AND DISTRIBUTING MATERIALS, SUPPLIES, VISUAL AIDS, AND EDUCATIONAL INFORMATION BE IMPROVED.

The materials, supplies, etc. required for the effective implementation of various aspects of Program activities are crucial. It is important, therefore, to improve the system for obtaining and distributing these educational materials. Various classrooms currently lack T4C supplies for implementation, for example.
APPENDIX "F"


